Amendments to the Specification:

Please replace the paragraph beginning at page 2, line 13, with the following rewritten paragraph:

In the meanwhile, in alloys of Fe-Si, since higher silicon contents allow ~~hysterisis~~ hysteresis loss, magnetostriction, ~~coersive~~ coercive force, and magnetic anisotropy among core loss properties to decrease and maximum permeability to increase, it is said that high silicon steel products are superior soft magnetic material. Then, the decrease of magnetostriction and the increase of maximum permeability do not continue limitlessly according to the increase of silicon content but show maximum values in 6.5% Si steel. Also, it is well known that magnetic properties of 6.5% Si steel reach the maximum state in high frequency band as well as commercial frequency band. Due to the superior magnetic properties in high frequency band, high silicon steel is mainly applicable to high frequency reactor for gas turbine generator, tank power supply, induction heating device, uninterruptible power supply, or the like, and high frequency transformer for plating power supply, welding machine, X-ray power supply or the like, and is being used as substitution material. In addition, the high silicon steel is applicable for use to reduce power consumption of a motor and improve the efficiency of the motor.

Please replace the paragraph beginning at page 3, line 20, with the following rewritten paragraph:

Among the prior art methods for the manufacture ~~high~~ of high silicon steel sheets, Japanese Patent Laid Open Publication No. 56-3625 discloses direct casting of high silicon steel using a single roll or twin rolls, Japanese ~~Paid~~ Patent Laid Open Publication No. 62-103321 discloses a warm rolling in which rolling is performed in a heated state at a proper temperature, and Japanese Patent Laid Open Publication No. 5-171281 discloses a clad rolling in which rolling is performed in a state wherein the high silicon steel is located at an inner portion and a low silicon steel is located at an

outer portion. However, the aforementioned ~~prior arts~~ prior art has not yet been commercialized.

Please replace the paragraph beginning at page 5, line 11, with the following rewritten paragraph:

Among the currently circulated electrical steel products, only non-oriented electrical steel sheets containing 6.5% Si are produced and sold as the high silicon steel product. Owing to an irregular arrangement of grain, the non-oriented electrical steel sheets containing 6.5% Si content is used in the rotator with a small magnetic deviation according to magnetizing ~~directions~~ direction orientations. However, high silicon grain-oriented electrical steel sheet products, which demonstrate excellent characteristics in use for the transformer mainly using only the magnetic property in the rolling direction, have ~~been~~ not yet been commercialized. Accordingly, various ~~tries for producing~~ attempts to produce a grain-oriented electrical steel sheet with superior magnetic properties due to high silicon content have been performed, but it has not been informed yet on the success to produce such products.

Please replace the paragraph beginning at page 9, line 4, with the following rewritten paragraph:

When comparing the interdiffusion reaction of Fe atoms and Si atoms, since the diffusion rate of Si is approximately two times greater than that of Fe atoms in a temperature range of 1000 - 1200 °C, a phenomenon occurs, known as the Kirkendall effect corresponding to a ~~non-homogenous~~ non-homogeneous diffusion state. This non-homogeneous diffusion state causes ~~non-homogenous~~ non-homogeneous state defects at a reaction interface or creates various compounds such as $FeSi_2$, FeSi, Fe_5Si_3 or Fe_3Si, which act as a factor in deteriorating magnetic properties. Accordingly, it is in fact impossible to produce high silicon grain-oriented electrical steel sheets having a ~~homogenous~~ homogeneous composition without surface defects by coating the silicon containing powder on the electrical steel sheet and diffusing Si atoms at a high temperature.

Please replace the paragraph beginning at page 14, line 9, with the following rewritten paragraph:

In the meanwhile, to improve coatability and surface shape of the matrix material in the present invention, it is ~~preferably~~ preferable to add ultra fine SiO_2 power, alumina powder and alumina sol to the coating composition prepared as above.

Please replace the paragraph beginning at page 15, line 16, with the following rewritten paragraph:

In the meanwhile, considering the actual coatability of the Fe-Si-based sintered powder prepared as above and the control of diffusion amount of Si as coated, the powder is dissolved in solvent ~~to made~~ to make a slurry solution, and then the prepared slurry solution is used as coating composition.

Please replace the paragraph beginning at page 16, line 17, with the following rewritten paragraph:

The present invention ~~manufacture~~ discloses the manufacture of high silicon electrical steel sheets by coating the aforementioned coating composition on electrical steel sheets manufactured by a conventional process and containing a predetermined content of silicon (preferably, containing 2.0 - 3.3 wt% silicon). In other words, the aforementioned coating composition is coated on surfaces of non-oriented electrical steel sheets as well as surfaces of grain-oriented electrical steel sheet manufactured by a conventional process and then annealed at a high temperature to thereby manufacture high silicon electrical steel sheets.

Please replace the paragraph beginning at page 19, line 21, with the following rewritten paragraph:

After that, the dried steel sheet is loaded in an annealing furnace and diffusion-annealed. At this time, the annealing temperature is restricted to 1000 - 1200 °C. If the annealing temperature is less than 1000 °C, siliconizing rate is too ~~late~~ slow so that a long time is taken for the diffusion and the surface shape at the boundary of

the siliconizing reaction is coarse and thus magnetic properties may be deteriorated. If the annealing temperature exceeds 1200 °C, reaction rate is too fast, and surfaces of rolled coil are adhered to deteriorate the separation workability.

Please replace the paragraph beginning at page 21, line 3, with the following rewritten paragraph:

This insulating coating layer is formed by a conventional method in which an insulating coating agent prepared by mixing a small amount of ~~chroic~~ chromic acid to ~~mixture~~ a mixture of phosphate of magnesium (Mg), aluminum (Al) and ~~Calcium~~ calcium (Ca), and colloidal silica ~~component, is coated, or,~~ component is coated or is formed by coating organic/inorganic composite coating agent having chromate and acryl-based resin as main components for drawability. However, the present invention is not restricted only to the aforementioned concrete composition of the insulating coating agent.

Please replace the paragraph beginning at page 21, line 15, with the following rewritten paragraph:

The manufacturing processes of the non-oriented electrical steel sheet may show ~~somewhat~~ some differences according to the manufacturers, basic manufacturing process, or use. However, the process generally includes the steps of: adjusting components in steel making; producing a steel slab from the molten steel; reheating the steel slab; hot rolling the reheated steel slab; annealing a hot rolled sheet and cold rolling an annealed steel ~~sheet)~~ sheet to adjust the thickness of the steel sheet; recrystallization annealing the cold-rolled steel sheet; and finish coating an insulating film. Various products for non-oriented electrical steel sheet are being produced and sold depending on the manufacturing process, Si content, or level of magnetic properties.

Please replace the paragraph beginning at page 22, line 4, with the following rewritten paragraph:

In the present invention, the matrix material on which the aforementioned coating composition is being coated is a cold rolled steel sheet obtained by a cold rolling among the manufacturing steps of non-oriented electrical steel sheet. The cold rolled steel sheet is coated with the coating composition and then annealed at a high temperature so as to have a high silicon content. At this time, the cold rolled steel sheet preferably contains 2.0 - 3.3% Si with respect to the weight % of the steel sheet itself. This is because if the Si content is less than 2.0%, it takes a long time for siliconizing reaction using Fe-Si-based powder, which is a siliconizing agent, and is disadvantageous in an economical aspect in that, if the Si content exceeds 3.3%, the steel sheet is brittle so that cold rolled capability is very poor.

Please replace the paragraph beginning at page 24, line 14, with the following rewritten paragraph:

In the present invention, when the coating composition having the aforementioned composition is coated on surfaces of the cold rolled steel sheet or surfaces of the ~~intermediated~~ intermediate annealed steel sheet by a roll coater, the coated amount of the coating composition is preferably determined by the below formulas 1 and 2:

$$Y - 5 \leq \text{coated amount} \leq Y + 5 \text{ ---------- formula 1}$$

$$Y(g/m^2) = 7650t\,(x1 - x2) / (A - 14.4) \text{ --------- formula 2}$$

Please replace the paragraph beginning at page 24, line 22, with the following rewritten paragraph:

Where 't' is thickness of matrix material, A is Si content (%) in the Fe-Si-based ~~powder),~~ powder, x1 is a target Si content (%) of matrix material, and x2 is an initial Si ~~content of~~ content (%) of matrix material.

Please replace the paragraph beginning at page 25, line 7, with the following rewritten paragraph:

After that, the dried steel sheet is loaded in an annealing furnace and diffusion-annealed (homogenized). At this time, the annealing temperature is restricted to 1000 - 1200 °C. If the annealing temperature is less than 1000 °CX, siliconizing rate is too ~~late~~ slow so that a long time is taken for the diffusion and the surface shape at the boundary of the siliconizing reaction is coarse and thus magnetic properties may be deteriorated. If the annealing temperature exceeds 1200 °C, reaction rate is too fast, and surfaces of rolled coil are adhered to deteriorate the separation workability.

Please replace the paragraph beginning at page 28, line 7, with the following rewritten paragraph:

The steel sheets coated with the Fe-Si-based powder were dried at a temperature of 400 °C, and after the coated state was visually observed, rolled in a large sized coil. The rolled steel sheets were homogenized at 1125 °C in a nitrogen atmosphere containing 50% hydrogen for 4 hours. Afterwards, non-reacted substances remaining on the steel sheet where the siliconizing reaction was completed were removed and surface states were observed. Thereafter, an insulation coating agent where a small amount of ~~chroic~~ chromic acid was added ~~to mixture~~ to a mixture of phosphate of magnesium (Mg), aluminum (Al) and ~~Calcium~~ calcium (Ca), and colloidal silica component, was coated on the steel sheets to form an insulation coating film, thereby manufacturing grain-oriented electrical steel sheets on which the insulating coating layer is formed.

Please replace the paragraph beginning at page 30, line 3, with the following rewritten paragraph:

On the contrary, the electrical steel sheet 1 having a small silicon content in the Fe-Si-based sintered powder was too small in silicon content as siliconized so that improvement effect in magnetic properties was poor. In the case of the electrical steel sheets 5 to 7 containing 70% or more Si, silicon content was large but ~~defect~~

defects such as ~~hole was~~ holes were generated so that magnetic properties of the steel sheet were weakened.

Please replace the paragraph beginning at page 33, line 2, with the following rewritten paragraph:

On the contrary, the electrical steel sheet 1 having a very small silicon content was too small in silicon content as siliconized so that improvement effect in magnetic properties was poor. In the case of the electrical steel sheets 5 to 7 containing 70% or more Si, silicon content was large but ~~defect~~ defects such as ~~hole was~~ holes were generated so that magnetic properties of the steel sheet ~~are~~ were weakened.

Please replace the paragraph beginning at page 34, line 15, with the following rewritten paragraph:

The steel sheets coated with the coating composition were dried at a temperature of 400 °C, and the coated state was visually observed. After that, the dried steel sheets were coiled in a large sized coil. The coiled steel sheets were diffusion annealed at 1125 °C in a nitrogen atmosphere containing 50% hydrogen for 4 hours. Afterwards, non-reacted substances remaining on the steel sheet where the siliconizing reaction was completed were removed and then an insulation coating agent where a small amount of ~~chroic~~ chromic acid was added ~~to mixture~~ to a mixture of phosphate of magnesium (Mg), aluminum (Al) and ~~Calcium~~ calcium (Ca), and colloidal silica component, was coated on the steel sheets to form an insulation coating film, thereby manufacturing final high silicon grain-oriented electrical steel sheets on which the insulating coating layer is formed.

Please replace the paragraph beginning at page 40, line 10, with the following rewritten paragraph:

The coiled steel sheets were homogenized with varying the annealing condition as shown in table 5 to thereby remove non-reacted substances remaining on the surfaces of the steel sheets. Then, an insulation coating agent where a small

amount of ~~chroic~~ chromic acid was added ~~to mixture~~ to a mixture of phosphate of magnesium (Mg), aluminum (Al) and ~~Calcium~~ calcium (Ca), and colloidal silica component, was coated on the steel sheets to form an insulation coating film, thereby manufacturing final high silicon grain-oriented electrical steel sheets on which the insulating coating layer is formed.